

PATENT COOPERATION TREATY

PCT

INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference CM2207MQ/VB	FOR FURTHER ACTION see Notification of Transmittal of International Search Report (Form PCT/ISA/220) as well as, where applicable, item 5 below.	
International application No. PCT/US 00/ 27137	International filing date (day/month/year) 02/10/2000	(Earliest) Priority Date (day/month/year) 08/10/1999
Applicant THE PROCTER & GAMBLE COMPANY et al.		

This International Search Report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.

This International Search Report consists of a total of 3 sheets.

☒ It is also accompanied by a copy of each prior art document cited in this report.

1. Basis of the report

- a. With regard to the **language**, the international search was carried out on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.

☐ the international search was carried out on the basis of a translation of the international application furnished to this Authority (Rule 23.1(b)).

- b. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international search was carried out on the basis of the sequence listing :

☐ contained in the international application in written form.

☐ filed together with the international application in computer readable form.

☐ furnished subsequently to this Authority in written form.

☐ furnished subsequently to this Authority in computer readable form.

☐ the statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.

☐ the statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished

2. ☐ **Certain claims were found unsearchable** (See Box I).

3. ☐ **Unity of invention is lacking** (see Box II).

4. With regard to the **title**,

☒ the text is approved as submitted by the applicant.

☐ the text has been established by this Authority to read as follows:

5. With regard to the **abstract**,

☒ the text is approved as submitted by the applicant.

☐ the text has been established, according to Rule 38.2(b), by this Authority as it appears in Box III. The applicant may, within one month from the date of mailing of this international search report, submit comments to this Authority.

6. The figure of the **drawings** to be published with the abstract is Figure No. ---

☐ as suggested by the applicant.

☐ because the applicant failed to suggest a figure.

☐ because this figure better characterizes the invention.

☐ None of the figures.

INTERNATIONAL SEARCH REPORT

International Application No

PCT/US 00/27137

A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 C09J123/10

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 C09J

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 95 10575 A (EXXON CHEMICAL PATENTS INC) 20 April 1995 (1995-04-20) page 6, line 1 -page 7, line 17 ---	1-7
X	WO 96 26967 A (MINNESOTA MINING & MFG) 6 September 1996 (1996-09-06) page 14, line 23 -page 15, line 5 ---	1-7
Y	WO 99 20664 A (MINNESOTA MINING & MFG) 29 April 1999 (1999-04-29) page 25, line 6 - line 17 ---	1-7
T	WO 99 52955 A (RIEGER BERNHARD) 21 October 1999 (1999-10-21) the whole document --- -/--	1-7



Further documents are listed in the continuation of box C.



Patent family members are listed in annex.

* Special categories of cited documents :

- *A* document defining the general state of the art which is not considered to be of particular relevance
- *E* earlier document but published on or after the international filing date
- *L* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- *O* document referring to an oral disclosure, use, exhibition or other means
- *P* document published prior to the international filing date but later than the priority date claimed

T later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

X document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

Y document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

G document member of the same patent family

Date of the actual completion of the international search

19 January 2001

Date of mailing of the international search report

07/02/2001

Name and mailing address of the ISA

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Schmidt, H

INTERNATIONAL SEARCH REPORT

International Application No

PCT/US 00/27137

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	<p>COLLINS ET AL: "elastomeric polypropylene" MACROMOLECULES, vol. 28, 1995, pages 3771-3778, XP000507390 table 5</p> <p>-----</p>	1-7

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/US 00/27137

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
WO 9510575	A	20-04-1995	NONE	
WO 9626967	A	06-09-1996	AU 4702796 A EP 0812335 A EP 0891991 A JP 11501342 T	18-09-1996 17-12-1997 20-01-1999 02-02-1999
WO 9920664	A	29-04-1999	AU 9808198 A EP 1023339 A	10-05-1999 02-08-2000
WO 9952955	A	21-10-1999	DE 19816154 A AU 3420999 A AU 3706899 A WO 9952950 A	21-10-1999 01-11-1999 01-11-1999 21-10-1999

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference CM2207MQ/VB	FOR FURTHER ACTION See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416)	
International application No. PCT/US00/27137	International filing date (day/month/year) 02/10/2000	Priority date (day/month/year) 08/10/1999
International Patent Classification (IPC) or national classification and IPC C09J123/10		
Applicant THE PROCTER & GAMBLE COMPANY et al.		

1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.



2. This REPORT consists of a total of 5 sheets, including this cover sheet.

- ☐ This report is also accompanied by ANNEXES, i.e. sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).

These annexes consist of a total of sheets.

3. This report contains indications relating to the following items:

- I ☒ Basis of the report
- II ☐ Priority
- III ☐ Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- IV ☐ Lack of unity of invention
- V ☒ Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- VI ☐ Certain documents cited
- VII ☐ Certain defects in the international application
- VIII ☒ Certain observations on the international application

Date of submission of the demand 05/02/2001	Date of completion of this report 23.01.2002
Name and mailing address of the international preliminary examining authority:  European Patent Office - P.B. 5818 Patentlaan 2 NL-2280 HV Rijswijk - Pays Bas Tel. +31 70 340 - 2040 Tx: 31 651 epo nl Fax: +31 70 340 - 3016	Authorized officer Schmidt, H Telephone No. +31 70 340 2461 

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No. PCT/US00/27137

I. Basis of the report

1. With regard to the **elements** of the international application (*Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rules 70.16 and 70.17)*):

Description, pages:

1-11 as originally filed

Claims, No.:

1-7 as originally filed

2. With regard to the **language**, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

These elements were available or furnished to this Authority in the following language: , which is:

- ☐ the language of a translation furnished for the purposes of the international search (under Rule 23.1(b)).
- ☐ the language of publication of the international application (under Rule 48.3(b)).
- ☐ the language of a translation furnished for the purposes of international preliminary examination (under Rule 55.2 and/or 55.3).

3. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

- ☐ contained in the international application in written form.
- ☐ filed together with the international application in computer readable form.
- ☐ furnished subsequently to this Authority in written form.
- ☐ furnished subsequently to this Authority in computer readable form.
- ☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
- ☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

4. The amendments have resulted in the cancellation of:

- ☐ the description, pages:
- ☐ the claims, Nos.:
- ☐ the drawings, sheets:

5. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed (Rule 70.2(c)):

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No. PCT/US00/27137

(Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.)

6. Additional observations, if necessary:

V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Yes: Claims	
	No: Claims	1-7
Inventive step (IS)	Yes: Claims	
	No: Claims	1-7
Industrial applicability (IA)	Yes: Claims	1-7
	No: Claims	

2. Citations and explanations
see separate sheet

VIII. Certain observations on the international application

The following observations on the clarity of the claims, description, and drawings or on the question whether the claims are fully supported by the description, are made:
see separate sheet

**INTERNATIONAL PRELIMINARY
EXAMINATION REPORT - SEPARATE SHEET**

International application No. PCT/US00/27137

1. The following documents (D1-D2) are referred to in this opinion; the numbering will be adhered to in the rest of the procedure:

D1 WO-A-96/26967

D2 WO-A-99/20664

Box V

2. The subject matter of present claim 1-7 does not appear to be novel in the sense of Art. 33(2) PCT

2.1 Subject matter of claim 1 is an article in which two elements are joined by an olefinic homopolymer of an isotacticity of less than 60% as determined from the (mmmm) ratio in NMR.

Example 36 in D1 describes a homopolymeric pressure sensitive adhesive of $M_w=500.000$, $M_n=228.000$. Page 15 line 4-5 discloses, that these adhesives have an (mmmm) percentage of 6-/+3%. According to table 3 the adhesives are used to join polypropylene to glass. The articles disclosed in D1 therefore are two elements of polypropylene and glass joined by a homopolymeric polypropylene with an isotacticity of less than 60%. Claim 1 is not novel in view of D1.

Claim 1 is also not novel in view of D2. It describes polypropylene used to make pressure sensitive adhesive (page 21, lines 13-16). Example 12 describes a homopolypropylene with an (mmmm) content of 30.9%. Although a skilled man will implicitly assume that an adhesive will be used to join two elements thus manufacturing an article, such articles are for example also disclosed in claim 24 and the tests in example 22 of D2.

2.2 Claims 2-7 do not contain new subject matter not disclosed in one of D1 or D2 (see also Box VIII)

3. Claims 1-7 do not appear to be inventive in view of Art. 33(3) PCT

2.1 None of the parameters characterizing the claimed articles disclosed in the description or the claims of present application lead to a technical effect which has

been demonstrated by comparative examples. Lacking evidence for a technical effect, all solutions including parameters serving as technical features have to be regarded as solutions to the problem of providing an alternative article comprising two elements joined by an elastic adhesive. Since articles comprising elastic adhesives are known (see D2: example 22 on page 48 describes articles of PBT joined by an adhesive. The adhesive comprises polypropylene of molecular weight $M_w=710000$ prepared according example 14. The polymer has a mmmm content of 0.9%, is untacky and elastic), an alternative elastic adhesive only characterised by more parameters not resulting in demonstrated technical effects cannot be regarded as inventive.

Box VIII

4.1 Claims 3, 4 and 6 of present application claim a result to be achieved by the present application and claim the underlying technical problem rather than its solution (PCT Guidelines III 4.7)

4.2 The term "an isotacticity of less than 60% of (mmmm) pentad concentration" in claims 1 and 7 is not clear. To what does the percentage refer to? Are the other 40% other pentads or other tacticity schemes? Moreover, the claim does not make clear how the (mmmm) pentads are measured (Art. 6 PCT)